



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-------------------------|--|------------------------------------|
| 10/795,845 | 03/08/2004 | Sivaprasath Swaminathan | 60046.0072US01 | 1248 |
| <div>7590 Hope Baldauff Hartman, LLC Suite 1010 1720 Peachtree Street., N.W. Atlanta, GA 30309</div> | | | <div>EXAMINER NGUYEN, TANH Q</div> | |
| | | | <div>ART UNIT 2182</div> | <div>PAPER NUMBER</div> |
| | | | <div>MAIL DATE 05/07/2007</div> | <div>DELIVERY MODE PAPER</div> |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/795,845

Applicant(s)

SWAMINATHAN, SIVAPRASATH

Examiner

Tanh Q. Nguyen

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 9, 19 are objected to because of the following informalities: "A computer storage media" should be replaced "A computer storage medium" - as media represents more than one medium.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 3-8, 13-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 3 recites "transmitting data on the communications port for reception by the device" on line 5. Claim 13 recites "transmitting data on the communications port for reception by a device connected to the communications port" on lines 4-5.

The examiner cannot find support for such limitations in the specification. The specification instead support a DTR line being toggled in a modem control register of a server computer 104, and a device responding to the DTR line by **sending data to the UART of the server computer 104**" [page 11, lines 10-15], hence the device

transmitting data **from** the device, (i.e. **not transmitting data for reception by the device**). Applicant is required to specifically point out the support for the limitations in the claims by page and line numbers, and drawings and labels - as appropriate, to overcome the rejections.

4. The rejections that follow are based on the examiner's best interpretation of the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9, 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagin (US 6,560,660) in view of Graf (US 6,317,798).

7. As per claim 1, Flanagin teaches a method for disabling a first requesting application program capabilities [53, FIG. 1] in the presence of an incompatible device, the method comprising:

determining whether a communications port has been enabled for utilization with a first requesting application program feature (the operating system accepts requests for use of serial port 38 and grants exclusive use to a first requesting application program [col. 3, lines 26-32], hence the serial port being determined to be enabled for utilization with the first requesting application program);

in response to determining that the communications port has been enabled for exclusive use by the first requesting application program, determining whether a device connected to the communications port is incompatible with the first requesting application program [col. 4, lines 1-8]; and

in response to determining that an incompatible device is connected to the communications port, disabling the first requesting application program feature [col. 4, lines 9-12; col. 5, lines 33-36; col. 5, lines 38-44].

Flanagin further teaches the first requesting application program being a remote device service program [col. 3, lines 37-40], but does not specifically teach the first requesting application program being a console redirection application program provided by a BIOS.

Graf teaches a console redirection provided by a BIOS allowing I/O operation within a remote server to be redirected to a management console of another server in a different location, and further allowing for troubleshooting boot problems from the remote location [col. 1, lines 47-57]

Since a BIOS-provided console redirection application program is no more than a specific remote device service application program, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate BIOS-provided console redirection, as is taught by Graf, as the remote device service of Flanagin in order to manage I/O operations of the server from a remote location and to troubleshoot boot problems from the remote location.

8. As per claim 2, Graf teaches using a BIOS setup utility to enable console

redirection [col. 1, lines 56-57]. Since it was known in the art at the time the invention was made to use a BIOS utility setup utility to specify configuration data for the enablement of a given feature, store the specified configuration data in a nonvolatile memory, and read the configuration data from the nonvolatile memory to determine whether the given feature is enabled, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store configuration data for the enablement of the console redirection in a nonvolatile memory and to read the configuration data stored in the nonvolatile memory in order to determine whether console redirection is enabled.

9. As per claim 3, Flanagin teaches the communications port being enabled for communication, transmitting data on the communications port, and determining whether the device connected to the communications port is incompatible with the first requesting application program [100-106, FIG. 3]. Graf teaches the first requesting application program being a console redirection application program (see rejection above), and console redirection involving a UART of the server [col. 5, lines 56-59].

Flanagin/Graf does not teach determining that a non-UART device is connected to the communications port in response to determining that a receive buffer of the communications port contains data.

Since it was known in the art at the time the invention was made for a non-UART device (such as a mouse) connected to a communications port to respond to the toggling of the DTR line in a register (at address 3FC/2FC on standard IBM-compatible computers) by sending data to the UART of the server, and to read a line status register

(at address 3FD/2FD on standard IBM-compatible computers) to determine that the receive buffer of the communications port contains data, it would have been obvious to one of ordinary skill in the art at the time the invention was made to read the line status register to determine that the receive buffer of the communications port contains data, hence determining that the device connected to the communications port is a non-UART device (i.e. the mouse).

10. As per claim 4, since it was known in the art at the time the invention was made to store an application program in a compressed format due to memory constraint and not uncompressing or executing an application program until the application program needs to be executed for power saving, it would have been obvious to one of ordinary skill in the art at the time the invention was made to compress the application program (i.e. the console redirection feature of Flanagin/Graf) in order to meet memory constraints, and to not uncompress or execute the application program when the application is not needed in order to save power.

11. As per claim 5, Flanagin teaches enabling the first requesting application program in response to a compatible device being connected to the communications port [108, FIG. 3].

12. As per claim 6, it would have been obvious to one of ordinary skill in the art at the time the invention was made to uncompress the compressed application program (i.e. the console redirection feature of Flanagin/Graf) in order to execute the application program (see the rejection of claim 4 above).

13. As per claims 7-8, Flanagin/Graf teaches the incompatible device comprising a

modem (see the rejection of claim 3 above); Flanagan teaches a BIOS power-on self test procedure [col. 1, lines 34-36].

14. As per claim 9, the claims generally correspond to claim 1 above, and are rejected on the same basis.

15. As per claim 11, see the rejection of claims 1, 3 above.

16. As per claims 12-19, see the rejections of claims 2-9 above.

Response to Arguments

17. Applicant's arguments with respect to the pending claims have been considered but are either moot in view of the new ground(s) of rejection, or not persuasive.

18. With respect to claim 1, applicant argues that Flanagan does not teach all the limitations of the claim, and also essentially argues that the benefits that result from a combination of the references do not provide a motivation for combining the references in the suggested manner - hence impermissible hindsight being used for the combination.

The argument is not persuasive because the examiner already considers Flanagan not teaching all the limitations of the claim, and because it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

1971). Furthermore, the motivation to combine the references can be found in the teachings of Graf, as is indicated in the rejection - hence the combination not being based on hindsight reasoning.

19. With respect to claim 3, applicant argues that the cited references do not teach the limitations in **amended** claim 3. The argument is moot in view of the new grounds of rejection.

20. With respect to claim 3, applicant also requests that a prior art reference be cited in order to support a well-known statement made in the previous office action. In response, the examiner refers applicant to page 11, lines 12-20 of applicant's disclosure for support of the well-known statement made in the previous office action. As the disclosure teaches the features of **standard** IBM-compatible personal computers, the disclosure teaches the features being well known.

21. With respect to claims 4-6, applicant requests that a prior art reference be cited in order to support a well-known statement made in the previous office action. In response, the examiner refers applicant to Budrovic et al. (US 6,865,664) teaching conserving memory resources by storing an application program in a compressed format and uncompressing the compressed application for execution [col. 14, lines 46-54], and to Kawanabe (US 7,068,386) teaching executing an application program at an appropriate timing as needed [col. 42, lines 37-42].

22. With respect to claims 11 and 13, the claims further limit the device of claims 1, 3 to be a non-UART device. Support for the device of claims 1, 3 to be a non-UART device is provided by the combination of Flanagan, Graf with well known features of

standard IBM-compatible personal computers as discussed above with respect to claim

3. Flanagan, Graf and the well-known statement therefore teach the limitations of claims 11 and 13.

23. With respect to claims 14-16, applicant essentially repeats the argument made with respect to claims 4-6. The argument is not persuasive for the same reasons provided with respect to claims 4-6 above.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Q. Nguyen whose telephone number is 571-272-

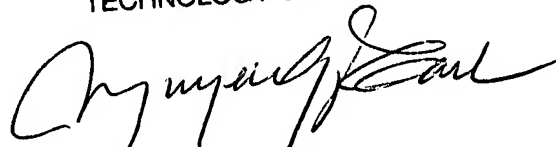
Art Unit: 2182

4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100



April 28, 2007

TQN
April 28, 2007